

CT
end

controls all of the network specific switching, the network control elements include a network control switch and a plurality of channel cluster modules, the channel cluster modules are arranged for transmitting downstream signals on one carrier frequency and are coupled to the sub-network corresponding to the network control node, and wherein the transmission network comprises a plurality of sub-networks coupled to the network control elements.

CZ
D1

3. Communication system according to claim 1, wherein the channel cluster modules comprise at least one downstream channel module.

C3
D1

7. An Access node connectable to a transmission network, and to a non-dedicated network switch, the access node comprising:
an access node switch coupled to a plurality of network control elements, wherein the access node switch is connectable to the network switch, and the access node switch controls all of the network specific switching, wherein the network control elements comprise a network control switch and a plurality of channel cluster modules, in that the network control node router is coupled to the access node router and to the channel cluster modules, and in that the channel cluster